

## ABSTRACT OF THE DISCLOSURE

2        A housing for a thin active probe has two identical molded housing-halves that when assembled  
4        form a cavity that encloses the chassis upon which is carried the active circuitry of the probe. The parts  
6        exhibit complementary self-symmetry about a longitudinal axis, such that when one is rotated about that  
8        axis it performs the mating functions needed to interlock with another part representing its un-rotated  
10      self. Interlocking is accomplished by circular tabs and sockets that interfere and prevent the parts from  
12      separating once the tabs are in the sockets. The circular tabs are joined to the balance of the housing-half  
14      that carries them by a narrow neck and can be sprung over the other housing-half to return to their  
16      natural position and fit into a circular socket in that other housing-half. A tapered edge or ramp portion  
18      on the underside of each circular tab allows it to automatically spring out of the way as the two parts are  
20      moved toward each other in a direction generally perpendicular to the longitudinal axis of the parts. Each  
      circular socket contains a stop that prevent its tab from completely passing through the socket. Each  
      housing-half has a straight tab between its circular tabs that enter an interior recess on the other housing-  
      half to support its circular sockets as they receive their tabs. Each housing-half contains in a front surface  
      an entire aperture for a detachable probe lead, and each contains in a rear surface at least one half-  
      aperture that, when the two housing-halves are joined, forms a larger aperture whose perimeter engages  
      a corresponding groove in a strain relief for a cable. The exterior surface of the mated housing-halves  
      has, on each side through which runs the line of the mating edges, a flat shallow recess. The interlocking  
      circular tabs and sockets are located within the extent of this shallow recess, which can receive an  
      adhesive label that may conceal and stiffen the interlocking circular tabs and sockets.